			1.55	Tes: /
L Number	Hits	Search Text	DB	Time stamp
1	8757	cyclodextrin	USPAT;	2003/05/09 09:40
			US-PGPUB	İ
2	142324	acyl acylat\$6 acetyl triacetyl	USPAT;	2003/05/09 09:40
	•		US-PGPUB	
3	3989	nitroglycerin\$4	USPAT;	2003/05/09 09:40
			US-PGPUB	
4	2385	isosorbide	USPAT;	2003/05/09 09:41
			US-PGPUB	
5	15823	prostaglandin prostanoid	USPAT;	2003/05/09 09:42
		-	US-PGPUB	
6	412	cyclodextrin same (acyl acylat\$6 acetyl	USPAT;	2003/05/09 09:42
		triacetyl)	US-PGPUB	
7	20147	nitroglycerin\$4 isosorbide (prostaglandin	USPAT;	2003/05/09 09:42
		prostanoid)	US-PGPUB	
8	8757	cyclodextrin (cyclodextrin same (acyl	USPAT;	2003/05/09 09:42
		acylat\$6 acetyl triacetyl))	US-PGPUB	
9	1422	(nitroglycerin\$4 isosorbide (prostaglandin	USPAT;	2003/05/09 09:42
		prostanoid)) and (cyclodextrin	US-PGPUB	
	'	(cyclodextrin same (acyl acylat\$6 acetyl		
		triacetyl)))		
10	5379	nitroglycerin\$4 isosorbide	USPAT;	2003/05/09 09:43
			US-PGPUB	
11	523	(cyclodextrin (cyclodextrin same (acyl	USPAT;	2003/05/09 09:43
		acylat\$6 acetyl triacetyl))) and	US-PGPUB	
		(nitroglycerin\$4 isosorbide)		
12	15	nitroglycerin\$4 and (cyclodextrin same	USPAT;	2003/05/09 09:47
		(acyl acylat\$6 acetyl triacetyl))	US-PGPUB	
13	25	isosorbide and (cyclodextrin same (acyl	USPAT;	2003/05/09 10:07
		acylat\$6 acetyl triacetyl))	US-PGPUB	
14	38	(prostaglandin prostanoid) and	USPAT;	2003/05/09 10:07
		(cyclodextrin same (acyl acylat\$6 acetyl	US-PGPUB	
		triacetyl))		
				L

L Number	Hits	Search Text		
1	7374	cyclodextrin	DB	Time stamp
2	95287		EPO; JPO; DERWENT	2003/05/09 10:26
3	9479	isosorbide nitroglycerin\$2 prostaglandin	EPO; JPO; DERWENT	2003/05/09 10:26
4	15	cyclodextrin and (acyl acylotect)	EPO; JPO; DERWENT	2003/05/09 10:26
5		prostaglandin prostagualin prostaglin prostagling	EPO; JPO; DERWENT	2003/05/09 10:32
6	3	cyclodextrin and (isosophida	EPO; JPO; DERWENT	2003/05/09 10:32
	f	nitroglycerin\$2 prostaglandin prostacyclin prostanoid) and maltosyl	EPO; JPO; DERWENT	2003/05/09 10:32

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FILE 'REGISTRY' ENTERED AT 14:05:08 ON 09 MAY 2003
L5
              1 S DILTIAZEM/CN
              0 S C72 H96 048/MF
0 S C72 H96 048/MF
L6
L7
L8
            918 S C6 H12 O6/MF
        24112 S CYCLODEXTRIN
2549762 S .ALPHA.
L9
L10
L11
         7152 S L9 AND L10
             49 S OCTADECAACETATE
L12
             10 S L11 AND L12
L13
     FILE 'CAPLUS' ENTERED AT 14:53:22 ON 09 MAY 2003
            31 S L13
L14
         711645 S .GAMMA.
L15
             13 S L14 AND L15
L16
     FILE 'REGISTRY' ENTERED AT 14:56:56 ON 09 MAY 2003
L17
       115465 S .GAMMA.
L18
           3594 S L17 AND L9
         437863 S ?ACETATE
0 S '?ACETATE'
L19
L20
         437863 S 'ACETATE'
L21
L22
           166 S L21 AND L18
              4 S L22 AND TETRACOSAACETATE
L23
     FILE 'CAPLUS' ENTERED AT 15:03:49 ON 09 MAY 2003
L24
            22 S L23
L25
             15 S L24 NOT L16
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ACCESSION NUMBER: 2003:242405 CAPLUS DOCUMENT NUMBER: 138:256307 Barrier material comprising nanosize metal particles TITLE: having excellent barrier properties. INVENTOR(S): Beaverson, Neil; Wood, Will PATENT ASSIGNEE(S): Cellresin Technologies, LLC, USA PCT Int. Appl., 48 pp. SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE WO 2003025067 A1 20030327 WO 2002-IB3804 20020916 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG PRIORITY APPLN. INFO.: US 2001-322637P P 20010917 The material comprises (I) a matrix materials, (II) an effective absorbing amt. of a cyclodetrin materials which is dispersed in the matrix material, and (III) nanosized particles of zinc or similar reacting metal alloy (e.g, nanozinc). The cyclodextrin, free of an inclusion complex compd., comprises an .alpha.-cyclodextrin, a .beta.-cyclodextrin, a .gamma.-cyclodextrin or mixt. thereof, having pendant moieties or substituents that render the cyclodextrin compatible with the matrix materials (e.g., triacetyl .alpha.-cyclodextrin). The material is suitable for food-contact packaging, flexible packaging to dispose of adult and baby diapers, incontinent products, hospital and household waste and also for packaging pharmaceutical products, medical devices and dental materials. REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L14 ANSWER 2 OF 31 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2002:752349 CAPLUS DOCUMENT NUMBER: 137:287703 TITLE: Cyclodextrin composition for preparing substances having nano-pores INVENTOR(S): Yim, Jin Heong; Mah, Sang Kook; Lyu, Yi Yeol; Nah, Eun Ĵи Samsung Electronics Co., Ltd., S. Korea PATENT ASSIGNEE(S): SOURCE: Eur. Pat. Appl., 22 pp. CODEN: EPXXDW DOCUMENT TYPE: Patent LANGUAGE -English FAMILY ACC. NUM. COUNT: 2 PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE EP 1245628 A1 20021002 EP 2001-309616 20011114 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR 293989 A2 20021009 JP 2002-1 JP 2002293989 JP 2002-16754 20020125 PRIORITY APPLN. INFO.: A 20010327 KR 2001-15883 OTHER SOURCE(S): MARPAT 137:287703 The present invention provides a compn. for prepg. substances having nano-pores, said compn. comprising cyclodextrin deriv. as porogens, thermostable org. or inorg. matrix precursor, and solvent for dissolving said two solid components. There is also provided a low-k interlayer insulating film having evenly distributed nano-pores with a diam. less than 50 .ANG., which is required for semiconductor devices. Thus, hydrosilylating 2,4,6,8-tetramethyl-2,4,6,8-tetravinylcyclotetrasiloxane with trichlorosilane, followed by reacting the resulting deriv. with MeOH gave 2,4,6,8-tetramethyl-2,4,6,8-tetra(trimethoxysilylethyl)cyclotetrasilo xane, which was ring-opening polymd. to give a polysiloxane (I). Mixing 12% a purified I with 10.0% heptakis(2,4,6-tri-O-methyl)-.beta.cyclodextrin in MIBK, spin coating the resulting mixt. on a boron-doped Si

L14 ANSWER 1 OF 31 CAPLUS COPYRIGHT 2003 ACS

wafer, baking at 150.degree. and at 250.degree. for 1 min each and calcining at 420.degree. for 60 min gave a dielec. film with thickness 5909 .ANG. and dielec. const. 2.25. REFERENCE COUNT: THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L14 ANSWER 3 OF 31 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2002:185185 CAPLUS DOCUMENT NUMBER: 136:247829 TITLE: Preparation of (maltohexaosyloxypropoxy)tetraphenylpor phyrin derivatives as photosensitizers and compositions comprising the same INVENTOR(S): Yano, Shigenobu; Kakuchi, Toyoji; Kinoshita, Isamu PATENT ASSIGNEE(S): San-Ei Gen F.F.I., Inc., Japan SOURCE: PCT Int. Appl., 32 pp. CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

```
PATENT NO. KIND DATE APPLICATION NO. DATE

WO 2002020621 Al 20020314 WO 2001-JP7757 20010906

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2001084465 A5 20020322 AU 2001-38465 20010906

PRIORITY APPLN. INFO::

JP 2000-273650 A 20000908
```

WO 2001-JP7757 W 20010906 OTHER SOURCE(S): MARPAT 136:247829 Tetraphenylporphyrin derivs. of the general formula (I) or salts thereof [R1, R2, R3 and R4 are each independently a group represented by the formula Q, p-(n-dodecyloxy)phenyl, or 2,4,6-trimethylphenyl with the proviso that at least one of R1 to R4 is the group represented by the formula Q and at least one of the others is p-(n-dodecyloxy)phenyl] are prepd. These compds. I are nontoxic to cells in darkness, possess increased hydrophilicity and lipophilicity due to the introduction of maltohexaose and decyl groups, and exhibit the selectivity for binding to tumor cells owing to the cell recognition by maltose residue, and show cytotoxicity under irradn. with long wavelength light which is transmissive in cells or tissues. Thereby, they are useful as photosensitizers for photodynamic therapy (PDT) or photodynamic diagnosis (PDD) or as pressure-sensitive coatings. Thus, a soln. of 1.0 g 4-acetoxybenzaldehyde, 1.6 g 4-decyloxybenzaldehyde, and 0.85 mL pyrrole in 200 mL propanoic acid was refluxed for 1 h to give 3.1% 5,10-di(4-decyloxyphenyl)-15,20-di(4-hydroxyphenyl)porphyrin which (20.7 mg) was stirred with 163.5 mg 1-iodopropyl nonadeca-O-acetyl-.beta.-Dmaltohexaose and 1 g K2CO3 in 20 DMF at room temp. for 60 h to give 45% 5,10-di(4-decyloxyphenyl)-15,20-bis[4-[3-(nonadeca-0-acetyl-.beta.-Dmaltohexaosyloxy)propoxy]phenyl]porphyrin (II). Deacetylation of II with NaOMe in methanol gave 69.3% 5,10-di(4-decyloxyphenyl)-15,20-bis[4-[3-(.beta.-D-maltohexaosyloxy)propoxy]phenyl]porphyrin (III). When irradiated by a 500 W halogen lamp fitted with a filter (cut-off wavelength of 500 nm and shorter), III in vitro showed cytotoxicity against Hela cells.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 4 OF 31 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:833134 CAPLUS
DOCUMENT NUMBER: 135:376749

Acylated cyclodextrin: guest molecule inclusion
complexes with drugs
Buchanan, Charles M.; Szejtli, Jozef; Szente, Lajos;
Vikmon, Maria; Wood, Matthew D.
PATENT ASSIGNEE(S): Eastman Chemical Company, USA
PCT Int. Appl., 68 pp.

DOCUMENT TYPE: CODEN: PIXXD2
Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

```
PATENT NO.
                           KIND DATE
                                                   APPLICATION NO. DATE
                            ----
         WO 2001085218
                            A2
                                  20011115
                                                 WO 2001-US13499 20010426
             W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
                 YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
             RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
                 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

225946 Al 20020228 US 2001-843037 20010426

EP 2001-928906 20010426
         US 2002025946
         EP 1280559
             R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
                 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
   PRIORITY APPLN. INFO.:
                                               US 2000-203500P P 20000511
                                               US 2000-205715P P 20000519
WO 2001-US13499 W 20010426
        The present invention is directed to a method of making an inclusion
        complex comprising an acylated cyclodextrin host mol. and a guest mol.,
        wherein the method comprises the steps of: (a) contacting the acylated
        cyclodextrin host mol. and the guest mol. to form an inclusion complex;
        and (b) pptg. the inclusion complex in an aq. medium. The present
        invention is further directed to an inclusion complex comprising an
        acylated cyclodextrin host mol. and a guest mol., wherein the guest mol. comprises form about 2 (wt.) to about 15 (wt.) of the inclusion complex.
        Moreover, the present invention relates to a compn. comprising a polymer
        and an inclusion complex, wherein the inclusion complex comprises an
        acylated cyclodextrin host mol. and a guest mol. and medical devices and solid pharmaceutical compns. comprised thereof. Triacetyl
        .beta.-cyclodextrin-nitroglycerin complexes were prepd. and release of
       nitroglycerin from the complex studied.
  L14 ANSWER 5 OF 31 CAPLUS COPYRIGHT 2003 ACS
  ACCESSION NUMBER:
                             2001:561259 CAPLUS
  DOCUMENT NUMBER:
                             135:304086
  TITLE:
                             Oligosaccharide analogues of polysaccharides, Part 22.
                             Synthesis of cyclodextrin analogues containing a
                             buta-1,3-diyne-1,4-diyl or a butane-1,4-diyl unit
 AUTHOR (S):
                             Hoffmann, Barbara; Zanini, Diana; Ripoche, Isabelle;
                             Burli, Roland; Vasella, Andrea
 CORPORATE SOURCE:
                             Laboratorium fur Organische Chemie, ETH-Zentrum,
                             Zurich, CH-8092, Switz.
 SOURCE:
                             Helvetica Chimica Acta (2001), 84(6), 1862-1888
                             CODEN: HCACAV; ISSN: 0018-019X
 PUBLISHER:
                             Verlag Helvetica Chimica Acta
 DOCUMENT TYPE:
                            Journal
 LANGUAGE:
                            English
 OTHER SOURCE(S):
                            CASREACT 135:304086
      A peracetylated hexaamylose (maltohexaose) was obtained by an improved
      acetolysis of cyclomaltohexaose (.alpha.-cyclodextrin, .alpha.-CD), and
      transformed into the benzyl- and 4-chlorobenzyl-protected thioglycosides.
      Sequential chain elongation by glycosidation of the C-ethynylated
      glucosides gave the .alpha.-anomeric heptaglycosides and their anomers.
      These were transformed into the glycosyl acceptors. Glycosidation of
      these acceptors led to the benzyl-protected octasaccharides
      .alpha..alpha.5.alpha. and .beta..alpha.5.alpha., e.g. I, and to the
      chlorobenzylated analogs .alpha.alpha.5.alpha. and .beta.alpha.5.alpha.
      .alpha..alpha.5.beta. and .beta..alpha.5.beta.. Hay coupling of OBn- and
     OAc-protected linear octaoses .alpha..alpha.5.alpha. and .beta..alpha.5.alpha. led to the cyclooctaamylose (.gamma.-cyclodextrin)
      analogs. The influence of the constitution and configuration of the
     linear precursors on the rate and yield of the cyclization was relatively
     weak. Deprotection and hydrogenation of the cyclooctaamylose
      (.gamma.-cyclodextrin) analogs yielded the .gamma.-CD analogs, e.g. II,
     where one glycosidic O-atom is replaced by a butanediyl group, while FeCl3-promoted dechlorobenzylation did not affect the butadiyne moiety and
     afforded the acetyleno .gamma.-CD analogs. MM3* Force-field calcns.
     evidence the strong influence of the configuration and constitution of the
     new .gamma.-CD analogs on the shape of the cavity.
REFERENCE COUNT:
                                 THERE ARE 64 CITED REFERENCES AVAILABLE FOR THIS
                           64
```

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L14 ANSWER 6 OF 31 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:510677 CAPLUS
DOCUMENT NUMBER: 135:33231

TITLE:

Preparation and characterization of novel peracetylated cyclodextrin complexes Buchanan, C. M.; Dixon, D. W.; Offermann, R. J.;

AUTHOR(S):

CORPORATE SOURCE: SOURCE:

Szejtli, J.; Szente, L.; Vikmon, M.

Eastman Chemical Company, Kingsport, TN, USA Cyclodextrin: From Basic Research to Market,

International Cyclodextrin Symposium, 10th, Ann Arbor, MI, United States, May 21-24, 2000 (2000), 526-536.

Wacker Biochem Corp.: Adrian, Mich.

CODEN: 69BFYD

DOCUMENT TYPE: LANGUAGE:

Conference; (computer optical disk)

English

The pptn. method was used as a practical and reliable technique for prepg. AB inclusion complexes of triacetyl-cyclodextrin (CD) that would be applicable to various different types of guest compds. The oily multicomponent vanilla and lemon exts. could be converted to solid triacetyl-CD/fragrance complexes by the pptn. method using acetone as the common solvent. Complexes of triacetyl-CD and fragrances provided an acceptable component distribution and total fragrance load. An aq. alc. soln. was the preferred common solvent in prepg. triacetylated CD/nitroglycerin (NG) and isosorbide 5-mononitrate complexes. X-ray diffractometry and thermoanal. investigations demonstrated complex formation in solid state. Complexation considerably reduced the volatility, thermal and storage stability problems of the complexed guests. Triacetyl-.beta.-CD could be considered as a multiparticulate sustained release carrier matrixes and may be useful for the prepn. of sustained release drug formulations.

L14 ANSWER 7 OF 31 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2001:396940 CAPLUS

DOCUMENT NUMBER:

135:20104

TITLE:

Method for producing polymers on the basis of

1,3-dienes

INVENTOR (S):

Groenendaal, Lambertus; Ritter, Helmut; Storsberg,

Joachim

PATENT ASSIGNEE(S): SOURCE .

Bayer Aktiengesellschaft, Germany PCT Int. Appl., 16 pp.

DOCUMENT TYPE:

CODEN: PIXXD2 Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

```
PATENT NO.
                     KIND DATE
                                            APPLICATION NO. DATE
     WO 2001038408
                     A2
                             20010531
                                             WO 2000-EP11096 20001110
                       A3
     WO 2001038408
                             20020620
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     DE 19956326
                       A1 20010531
                                             DE 1999-19956326 19991123
PRIORITY APPLN. INFO.:
```

DE 1999-19956326 A 19991123 The invention relates to a method for producing polymers on the basis of 1,3-dienes by radical polymn. of cyclodextrin-complexed 1,3-dienes and optionally other unsatd. monomers which can optionally also be cyclodextrin-complexed, in an aq. soln. optionally in the presence of initiators and, optionally, .gtoreq.1 of chain-transfer agents, additives, and fillers. The water-sol. is increased and the vapor pressure decreased of the dienes by complexing with cyclodextrin, so that emulsifiers are not necessary in the polymn. and the polymn. may be performed in the absence of pressure in water.

L14 ANSWER 8 OF 31 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2000:822614 CAPLUS

DOCUMENT NUMBER:

134:5258

TITLE:

Procedure for the production of .pi.-conjugated

polymers

INVENTOR(S):

Groenendaal, Lambertus; Jonas, Friedrich; Pielartzik,

Harald; Ritter, Helmut; Storsberg, Joachim

PATENT ASSIGNEE(S): SOURCE:

Bayer A.-G., Germany

Ger. Offen., 6 pp.

DOCUMENT TYPE:

CODEN: GWXXBX

LANGUAGE:

Patent

FAMILY ACC. NUM. COUNT: 1

German

PATENT INFORMATION:

```
PATENT NO.
                              KIND DATE
                                                       APPLICATION NO. DATE
           -----
          DE 19931114 A1 20001123 DE 1999-19931114 19990706
WO 2000072331 A1 20001130 WO 2000-EP4107 20000508
              2000072331 A1 20001130 WO 2000-EP4107 20000508

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW- GH- GM- KE- IS- MW- SD- SI, SZ, TZ- IIG ZW- AT- BE, CH, CY, DE
              RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
              198799 A1 20020424 EP 2000-927161 20000508
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
          EP 1198799
                   IE, SI, LT, LV, FI, RO, MK, CY, AL
          JP 2003500526 T2 20030107
                                                     JP 2000-620638 20000508
   PRIORITY APPLN. INFO.:
                                                    DE 1999-19923140 Al 19990520
                                                    DE 1999-19931114 A 19990706
                                                   WO 2000-EP4107 W 20000508
        The process involves at least the steps: (1) formation of an inclusion
         compd. between a monomer and a cyclodextrin; and (2) polymn. of the
         monomer within the inclusion compd. by means of a chem. oxidizing agent.
         The cyclodextrin compd. intermediates are esp. suitable for the manuf. of
         multilayer printed circuit boards with through connections. Thus, 64 g
         3,4-(ethylenedioxy)thiophene was added to a soln. of 600 g
         2,6-dimethyl-.beta.-cyclodextrin in 1 L H2O and activated ultrasonically
        to form an inclusion compd., which was oxidatively polymd. with FeCl3. In
        the absence of FeCl3 or a similar oxidizing agent the cyclodextrin compd.
        was stable toward oxidn. by air, and the intensity of the monomer odor was
        also reduced.
  L14 ANSWER 9 OF 31 CAPLUS COPYRIGHT 2003 ACS
  ACCESSION NUMBER: 2000:592401 CAPLUS
  DOCUMENT NUMBER:
                                133:193619
  TITLE:
                                Bimetal cyanide-based catalysts used for preparing
                                polyether polyols
  INVENTOR(S):
                                Ooms, Pieter; Hofmann, Jorg; Gupta, Pramod;
                                Groenendaal, Lambertus
  PATENT ASSIGNEE(S):
                                Bayer A.-G., Germany
  SOURCE:
                                Eur. Pat. Appl., 11 pp.
                                CODEN: EPXXDW
 DOCUMENT TYPE:
                                Patent
  LANGUAGE:
                                German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:
       PATENT NO.
                          KIND DATE
                                                   APPLICATION NO. DATE
       EP 1029871 A1 20000823 EP 2000-102138 20000207
            R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
                IE, SI, LT, LV, FI, RO
DE 19906985 A1 20000831 DE 1999-19906985 19990219
US 6204357 B1 20010320 US 2000-500840 20000210
JP 2000237596 A2 20000905 JP 2000-34979 20000214
BR 200000700 A 20000829 BR 2000-700 20000221
PRIORITY APPLN. INFO:: DE 1999-19906985 A 19990219
AB Complexes prepd. from .gtoreq.1 bimetal cyanide, .gtoreq.1 cyclodextrin
      and .gtoreq.1 other ligand such a tert-BuOH exhibit high activity in
      ring-opening polymn. of alkylene oxides in presence of polyol initiators.
      Optionally, the complexes contain water and (or) water-sol. metal salt.
REFERENCE COUNT:
                                  THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
                             4
                                     RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L14 ANSWER 10 OF 31 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:209679 CAPLUS
DOCUMENT NUMBER:
                              132:248279
TITLE:
                              Diagnostic agents for pancreatic exocrine function
INVENTOR (S):
                              Kohno, Tadashi; Hosoi, Isaburo; Ohshima, Junko;
                              Shibata, Kunihiko; Ito, Asuka
PATENT ASSIGNEE(S):
                              Tokyo Gas Co., Ltd., Japan
SOURCE:
                              Eur. Pat. Appl., 28 pp.
                              CODEN: EPXXDW
DOCUMENT TYPE:
                              Patent
LANGUAGE:
                              English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
     PATENT NO.
                        KIND DATE
                                                 APPLICATION NO. DATE
      -----
```

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EP 989137 A2 20000329
EP 989137 A3 20001011
                                                 EP 1999-307554 19990924
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
     TE, SI, LT, LV, FI, RO
JP 2000159773 A2 20000613 JP 1999-261979 19990916
JP 2000159810 A2 20000613 JP 1999-263300 19990917
NZ 337946 A 20011130 NZ 1999-337946 19990921
NZ 507949 A 20020301 NZ 1999-507949 19990921
AU 9948865 A1 20000330 AU 1999-48865 19990922
AU 755444 B2 20021212
US 6254851 B1 20010703 US 1999-401739 19990923
NO 9904685 A 20000327 NO 1999-4685 19990924
PLITY APPLIN INFO
                                              NO 1999-4685 19990924
JP 1998-271252 A 19980925
JP 1998-271253 A 19980925
JP 1999-261979 A 19990916
JP 1999-263300 A 19990917
NZ 1999-337946 A1 19990921
PRIORITY APPLN. INFO.:
     The present invention provides a 13C-labeled oligosaccharide or
     polysaccharide or a salt thereof excluding U-13C-maltose, 13C-starch,
      1-13C-maltotetraose and 1-13C-amylose; a deriv. of the 13C-labeled
      oligosaccharide or polysaccharide or salt thereof; a 13C-labeled inclusion
      complex or a salt thereof, which comprises a cyclodextrin or a modified
      deriv. thereof as a host mol.; a 13C- or 14C-labeled fluorescein ester
      compd. or a salt thereof; and a diagnostic agents for pancreatic exocrine
      function comprising these compds. 13C- or 14C-labeled. These reagents
      provide a test, particularly a breath test, which imparts a low stress on
      subjects and gives the results in a short period of time.
L14 ANSWER 11 OF 31 CAPLUS COPYRIGHT 2003 ACS
                            1999:794323 CAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                             132:23166
TITLE:
                             Preparation of dioxane-substituted cyclodextrin
                             macromolecules and inclusion complexes with
                             cholesterol and hydrocortisone
INVENTOR(S):
                             Pitha, Josef
PATENT ASSIGNEE(S):
                             USA
SOURCE:
                             U.S., 13 pp., Cont.-in-part of U.S. 5,935,941.
                             CODEN: USXXAM
DOCUMENT TYPE:
                             Patent
LANGUAGE:
                             English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
      PATENT NO. KIND DATE APPLICATION NO. DATE
     US 6001821 A 19991214 US 1998-98490 19980617
US 5935941 A 19990810 US 1997-957359 19971024
                                             US 1995-595075 19951219
US 1997-957359 19971024
PRIORITY APPLN. INFO.:
     The prepn. of compns. contg. cyclodextrin moieties which are modified by
      fusing 1,4 dioxane rights to glucopyranosyl residues via alkylation of
      cyclodextrins with epichlorohydrin in refluxing suspension of calcium
     hydroxide is described. These compns. are suited as carrier for
     pharmaceuticals, agricultural chems.
REFERENCE COUNT:
                        1
                                   THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS
                                    RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L14 ANSWER 12 OF 31 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:267343 CAPLUS
DOCUMENT NUMBER:
                             130:334150
TITLE:
                             Synergistic bactericidal, fungicidal, and algicidal
                             compositions containing triazines, isothiazolines, and
                             {\tt triacetylcyclodextrin}
INVENTOR(S):
                             Kubota, Takao
                             Takeda Chemical Industries, Ltd., Japan
PATENT ASSIGNEE(S):
                             Jpn. Kokai Tokkyo Koho, 8 pp.
SOURCE:
                             CODEN: JKXXAF
DOCUMENT TYPE:
                             Patent
LANGUAGE:
                             Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
                     KIND DATE
                                           APPLICATION NO. DATE
      PATENT NO.
     JP 11116410 A2 19990427
                                                  JP 1997-303601 19971016
1997-303601 19971016
PRIORITY APPLN. INFO.: JP OTHER SOURCE(S): MARPAT 130:334150
                                              JP 1997-303601
     Title compns., useful for coatings, plastics, cooling water, etc., contain
```

triazines I [R1, R2 = H, (substituted) alkyl; R3, R4 = (substituted) (cyclo)alkyl; X = halo, alkylthio], isothiazolines II (R5 = alkyl; R6, R7

= H, halo; R6 = R7 .noteq. halo), and triacetyl-.alpha.-, .beta.-, and/or .gamma.-cyclodextrin. A suspension contg. I (R1 = R2 = H, R3 = t-Bu, R4 = cyclopropyl, X = SMe) 5, II (R5 = octyl, R6 = R7 = H) 5, and triacetyl-.beta.-cyclodextrin 30 wt.% was added to an acrylic styrene emulsion coating at 0.5 wt.% to show complete control of algae and fungi.

L14 ANSWER 13 OF 31 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1998:461817 CAPLUS

DOCUMENT NUMBER:

SOURCE:

129:203164

TITLE:

X-ray structure of hexakis(2,3,6-tri-O-acetyl)-.alpha.-

cyclodextrin

AUTHOR(S):

Harata, Kazuaki

CORPORATE SOURCE:

Biomolecules Department, National Institute of

Bioscience and Human-Technology, Tsukuba, 305, Japan

Chemistry Letters (1998), (7), 589-590

CODEN: CMLTAG; ISSN: 0366-7022

PUBLISHER: DOCUMENT TYPE:

Chemical Society of Japan Journal

LANGUAGE:

English

Crystal structure of hexakis(2,3,6-tri-O-acetyl)-.alpha.-cyclodextrin (cyclodextrin peracetate) was detd. by the X-ray method. The mol. with twofold crystallog. symmetry has a cavity with the shape of a rectangular box. Both ends of the cavity are closed by acetyl groups and a water mols. is included in the mol. cage.

REFERENCE COUNT:

THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 14 OF 31 CAPLUS COPYRIGHT 2003 ACS

11

ACCESSION NUMBER: 1997:90212 CAPLUS

DOCUMENT NUMBER:

126:124705

TITLE:

Color photographic silver halide material with

improved stability

INVENTOR(S):

Hagemann, Joerg; Helling, Guenter

PATENT ASSIGNEE(S):

Agfa-Gevaert Ag, Germany Ger. Offen., 18 pp.

SOURCE:

CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

DE 19617770 DATE APPLICATION NO. DATE DE 19617770 A1 19961114 DE 1996-19617770 19960503 US 5935773 A 19990810 US 1996-639970 19960429 RITY APPLN. INFO.: DE 1995-19517073 19950510 US 59357/3
PRIORITY APPLN. INFO.:

MARPAT 126:124705

Tricing a yel

In the title material comprising a yellow-coupler-contg. Ag halide emulsion layer(s) and a cyan-coupler-contg. Ag halide emulsion layer(s) on a support, the emulsion layer(s) contains 10-1,000 mg/m2 of compd. I (R1-3 = H, alkyl, alkenyl, acyl; n = 6-8). Other additives to the cyan-coupler-contg. layer and to the yellow-coupler-contg. layer are also claimed with Markush structures to improve light- and dark storage stability.

L14 ANSWER 15 OF 31 CAPLUS COPYRIGHT 2003 ACS

DOCUMENT NUMBER:

ACCESSION NUMBER: 1996:687305 CAPLUS

126:47437

TITLE:

Self-Assembled Hexasaccharides: Surface

Characterization of Thiol-Terminated Sugars Adsorbed

on a Gold Surface

AUTHOR (S):

Fritz, Michaela C.; Haehner, Georg; Spencer, Nicholas D.; Buerli, Roland; Vasella, Andrea

CORPORATE SOURCE:

Department of Materials, ETH-Zuerich, Zurich, CH-8092,

Switz.

SOURCE:

Langmuir (1996), 12(25), 6074-6082 CODEN: LANGD5; ISSN: 0743-7463

PUBLISHER: DOCUMENT TYPE: American Chemical Society Journal

LANGUAGE:

English

A thiol-terminated hexasaccharide, protected with acetyloxy groups (AHS) was synthesized for the purpose of depositing self-assembled monolayers (SAMs) from soln. onto gold surfaces. XPS, ellipsometry, contact angle measurements, and imaging time-of-flight secondary ion mass spectroscopy (iToF-SIMS) were used to det. coverage, homogeneity, chem. compn., film thicknesses, and kinetics of film growth. Deprotection of the mols., i.e. replacing acetyloxy groups by hydroxyl groups, was performed following adsorption of AHS onto the surface, as well as prior to adsorption from soln. The chem. compn. of the resulting films, the film thickness, the d. of mols., and the nature of the surface functional groups were detd.

Adsorption of the deprotected mols. (DHS) from soln. was found to lead to a higher d. of adsorbed species.

L14 ANSWER 16 OF 31 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1996:130827 CAPLUS

DOCUMENT NUMBER:

124:189455

TITLE:

Use of ring forming oligosaccharide as charge

controlling material

INVENTOR(S):

Bauer, Ruediger; Macholdt, Hans-Tobias

PATENT ASSIGNEE(S): SOURCE:

Hoechst A.-G., Germany Ger. Offen., 29 pp.

CODEN: GWXXBX

DOCUMENT TYPE:

Patient.

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.	KIND	DATE		APPLICATION NO.	DATE
	DE 4418842	A1	19951207		DE 1994-4418842	19940530
	EP 687959	A1	19951220		EP 1995-106355	19950427
	EP 687959	B1	20011010			
	R: BE, CH,	DE, FR	, GB, IT, L:]		
	US 5585216	Α	19961217		US 1995-452339	19950526
	JP 08095306	A2	19960412		JP 1995-130699	19950529
F	RITY APPLN. INFO.	. :		DE	1994-4418842 A	19940530

OTHER SOURCE(S): MARPAT 124:189455

Use is described of oligo- or polysaccharides with 3-100 monomer saccharides as charge controlling or charge enhancing material in electrophotog. toners, triboelec. or electrokinetic proofing powder, and electret material where the oligo- or polysaccharide has a 1,4-linked or 1,6-linked pyranose structure. The material provides improved charging.

L14 ANSWER 17 OF 31 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: DOCUMENT NUMBER:

1995:396641 CAPLUS

TITLE:

Modification of cyclodextrins by insertion of a heterogeneous sugar unit into their skeletons.

Synthesis of 2-amino-2-deoxy-.beta.-cyclodextrin from

.alpha.-cyclodextrin

AUTHOR (S): CORPORATE SOURCE:

PUBLISHER:

Sakairi, Nobuo; Wang, Lai-Xi; Kuzuhara, Hiroyoshi Institute of Physical and Chemical Research, Saitama,

351-01, Japan

122:314996

SOURCE:

Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1995), (4),

437-43

CODEN: JCPRB4; ISSN: 0300-922X

Royal Society of Chemistry

DOCUMENT TYPE:

Journal LANGUAGE: English

Title aminodeoxycyclodextrin I was prepd. from .alpha.-cyclodextrin via acetolysis of fully acetylated .alpha.-cyclodextrin resulted in restricted fission of only one of the glucosidic bonds to give the acyclic maltohexaose peracetate and coupling of D-glucosamine precursor with O-benzylated maltohexaoside. Regioselective modifications of both terminals of hexasaccharide were performed by employing Lewis acid-catalyzed thioglycosidation and O-benzylidenation followed by its reductive cleavage as the key reactions, to give the partially O-benzylated maltohexaoside with the sole hydroxy group at the 4VI-position.

L14 ANSWER 18 OF 31 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 1992:513927 CAPLUS

DOCUMENT NUMBER:

117:113927

TITLE:

Cyclic heterooligosaccharides derived from cyclodextrins and strategy in their preparation

INVENTOR(S): Kuzuhara, Hiromi; Sakairi, Nobuo

PATENT ASSIGNEE(S):

Rikagaku Kenkyusho, Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent Japanese

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04089801	A2	19920324	JP 1990-204723	19900801
JP 08000843	B4	19960110		
PRIORITY APPLN. INFO.	:		JP 1990-204723	19900801

Claimed was derivs. such as cyclodextrins, e.g. of .beta.-form ring size and bearing non-glycosyl OH groups partially derivatized with O-PhCH2, O-Ac, and deoxy-C-amino or azido groups. Prepn. strategy comprises steps of (1) ring opening of a peracetylated cycldextrins of desired size, (2) thioglycosylating the product peracetylated maltooligomer, (3) deacetylating the thiomaltooligomer, (4) benzylidene-formation of the deprotected oligomer with .alpha.,.alpha.-dimethoxytoluene, and benzylation in the presence of catalyst, (5) deprotection of nonreducing end with BH3.NMe3-AlCl3, (6) coupling the produced oligosaccharide receptor with a desired saccharide donor in presence of catalyst, (7) deprotection as needed, and (8) ring closing using glycosylation catalyst to give final product. Exemplified was the insertion of an .alpha.-cyclodextrin with 6-0-acetyl-2-azido-3-0-benzyl-2-deoxy-4-0-(pmethoxybenzyl)-D-glucopyranose as the heterosaccharide donor. L14 ANSWER 19 OF 31 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 1991:409200 CAPLUS DOCUMENT NUMBER: 115:9200 TITLE: Insertion of a D-glucosamine residue into the .alpha.-cyclodextrin skeleton; a model synthesis of 'chimera cyclodextrins' AUTHOR (S): Sakairi, Nobuo; Wang, Lai Xi; Kuzuhara, Hiroyoshi CORPORATE SOURCE: Inst. Phys. Chem. Res., Wako, 351-01, Japan SOURCE: Journal of the Chemical Society, Chemical Communications (1991), (5), 289-90 CODEN: JCCCAT; ISSN: 0022-4936 DOCUMENT TYPE: Journal LANGUAGE: English OTHER SOURCE(S): CASREACT 115:9200 Efficient conversion of .alpha.-cyclodextrin peracetate into icosa-O-acetylmaltohexaose (I) by acetolytic fission of one glycosidic linkage, a series of manipulations including coupling with 2-azido-2-deoxy-D-glucopyranose deriv. II, recyclization and final work-up (catalytic hydrogenolysis etc.) gave a novel .beta.-cyclodextrin analog III contg. a D-glucosamine residue as a monosaccharide component. L14 ANSWER 20 OF 31 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 1991:143911 CAPLUS DOCUMENT NUMBER: 114:143911 TITLE: Preparation of maltooligosaccharides and their derivatives as substrates for carbohydrases INVENTOR(S): Kuzuhara, Hiromi; Sakairi, Nobuo PATENT ASSIGNEE(S): Institute of Physical and Chemical Research, Japan SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp. CODEN: JKXXAF DOCUMENT TYPE: Patent LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE ----------JP 02235898 A2 19900918 JP 06078365 B4 19941005 JP 1989-57235 19890309 PRIORITY APPLN. INFO.: JP 1989-57235 Maltooligosaccharide with 6-8 degree of polymn. or their acetyl derivs., useful as substrates for detn. of carbohydrases (e.g. .alpha.-amylase) (no data), are prepd. without prodn. of oligomers with lower degree of polymn. by acetolysis of cyclodextrins having totally- or partially-protected hydroxy groups with Ac2O or its derivs. in the presence of acids followed by optional deprotection. Thus, stirring a soln. of alpha.-cyclodextrin octadecaacetate in Ac20-conc. HCl at 50-60.degree. for 36 h gave 58% icosaacetylmaltohexaose, suspension of which in MeOH was treated with NaOMe overnight to give maltohexaose, quant. L14 ANSWER 21 OF 31 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 1991:24407 CAPLUS DOCUMENT NUMBER: 114:24407 TITLE: Interglycosidic torsion angle estimation by carbon-13-proton coupling constant measurements AUTHOR (S): Morat, Claude; Taravel, Francois R. CORPORATE SOURCE: Lab. Etud. Dyn. Struct. Select., Univ. Joseph Fourier, Grenoble, 38041, Fr. SOURCE: Bulletin of Magnetic Resonance (1989), 11(3-4), 321-3 CODEN: BUMRDT; ISSN: 0163-559X DOCUMENT TYPE: Journal LANGUAGE: English An equation relating 3-bond 13C-proton coupling and torsional bond angle was applied to detg. the interglycosidic torsional angle in acetylated

MARPAT 117:113927

OTHER SOURCE(S):

cyclomaltodextrins, cellulose triacetate, and amylose triacetate.

L14 ANSWER 22 OF 31 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1990:459717 CAPLUS

DOCUMENT NUMBER:

113:59717

TITLE:

Measurement of long-range heteronuclear couplings:

application to oligosaccharide conformation

AUTHOR(S):

Morat, Claude; Taravel, Francois R.

CORPORATE SOURCE:

Lab. Etud. Dyn. Struct. Sel., Univ. Joseph Fourier,

Grenoble, 38041, Fr.

SOURCE:

Tetrahedron Letters (1990), 31(10), 1413-16

CODEN: TELEAY; ISSN: 0040-4039

DOCUMENT TYPE:

Journal

LANGUAGE:

English

The vicinal or 3-bond coupling consts. [3J(C,H)] values were measured by using 2-dimensional J heteronuclear-resolved NMR spectroscopy to est. interglycosidic conformations in various oligosaccharides with a d.p. ranging from 6 to 30.

L14 ANSWER 23 OF 31 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: DOCUMENT NUMBER:

1987:45678 CAPLUS

106:45678

TITLE:

SOURCE:

AUTHOR (S):

Effect of methoprene complexation with cyclodextrins

on the juvenile hormone activity to silkworm Nakamura, Toshiie; Mochida, Kazuo; Saito, Osamu;

Kimura, Yukio

CORPORATE SOURCE:

Fac. Agric., Shimane Univ., Matsue, 690, Japan Shimane Daigaku Nogakubu Kenkyu Hokoku (1985), (19),

159-64

CODEN: SDNKBB; ISSN: 0370-940X

DOCUMENT TYPE:

Journal

LANGUAGE:

Japanese

Methoprene [40596-69-8] was included with .alpha. - and

.beta.-cyclodextrin (CD) or .alpha.- and .beta.-cyclodextrin peracetate (CDA), and expts. were undertaken to investigate the effects of these inclusion complexes on the feeding period of 5th instar of the silkworm (Bombyx mori), cocoon wt., and cocoon shell wt. When the complexes and free methoprene were dissolved into DMSO-MeOH (3:7), and then given topically to the larvae at the 48th h of the 5th instar, the feeding period after the application was clearly prolonged in methoprene .beta.-CD inclusion compd. [94123-02-1] and methoprene .beta.-CDA inclusion compd. [106200-27-5], but nearly equiv. in methoprene .alpha.-CD inclusion compd. [106200-28-6] and methoprene .alpha.-CDA inclusion compd. 106249-27-8] in comparison with free methoprene. The cocoon wt. was apparently increased with the prolongation of feeding period, but the cocoon shell wt. was not always increased and the percentage of cocoon shell wt. was decreased with the high activity of methoprene. The disappearance rate of methoprene in .beta.-CD and .beta.-CDA complexes on the cuticle of larvae was smaller than that of free methoprene. Therefore, the prolongation of feeding period in 5th instar and the increase of cocoon wt. by the inclusion complexes would be caused by the slow release of methoprene from the complex.

L14 ANSWER 24 OF 31 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1984:6997 CAPLUS

DOCUMENT NUMBER:

100:6997

TITLE:

A reversal in the order of H-6R and H-6S chemical shifts of some aldohexopyranose derivatives, associated with the acetylation of hydroxyl-4 and hydroxyl-6 groups. A distinction between 3- and 4-linked D-glucose residues in disaccharides

AUTHOR (S):

Rao, Vanga S.; Perlin, Arthur S.

CORPORATE SOURCE: SOURCE:

Dep. Chem., McGill Univ., Montreal, QC, H3A 2A7, Can. Canadian Journal of Chemistry (1983), 61(12), 2688-94

CODEN: CJCHAG; ISSN: 0008-4042

DOCUMENT TYPE:

Journal English

LANGUAGE:

Peracetylation of Me .alpha. - or .beta. - D-glucopyranoside reversed the order of the chem. shifts of the 6,6'-methylene protons; thus, the normal H-6R signal downfield of H-6S appears upfield in the spectra of the tetraacetates. Data for a wide range of regioselectively acetylated D-glucose derivs. shows that the reversal in chem. shifts of the methylene protons occurs only when both 0-4 and 0-6 are acetylated. Hence in the disaccharide series, shift reversal is not obsd. with glucose residues that are bonded glycosidically through 0-4, whereas the reversal occurs when the linkage is through 0-3. A conformational model to account for these effects suggests that the 4- and 6-0-acetyl substituents are oriented by a weak, mutual, interaction so that the magnetic anisotropy of the CO group of the 6-0-Ac can induce selective deshielding of H-6S. The comparable influences of O-benzoyl and O-(4-nitro)benzoyl substituents on

chem. shift are consistent with this proposal. D-Mannopyranosides have characteristics analogous to those of their D-gluco epimers, whereas D-galactopyranosides give a different, more complex, chem. shift pattern.

L14 ANSWER 25 OF 31 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 1983:143749 CAPLUS

DOCUMENT NUMBER:

CORPORATE SOURCE:

98:143749

TITLE:

Preparative methods and NMR analysis for silylated

derivatives of cyclodextrin

AUTHOR (S):

Wife, R. L.; Reed, D. E.; Leworthy, D. P.; Barnett, D.

M.; Regan, P. D.; Volger, H. C.

SOURCE:

Shell Biosci. Lab., Sittingbourne, UK

Proc. Int. Symp. Cyclodextrins, 1st (1982), Meeting Date 1981, 301-25. Editor(s): Szejtli, Jozsef. Reidel: Dordrecht, Neth.

CODEN: 48THAM

DOCUMENT TYPE:

Conference LANGUAGE · English

Methods for the complete or partial (selective) silylation of .beta.-cyclodextrin are described that provide intermediates for further derivatization. The method is applied to the sequential attachment and attempted capping of .beta.-cyclodextrin by a porphyrin template. Representative proton NMR spectra for a series of silyl derivs. and intermediates are analyzed to demonstrate further the advantage of the method.

L14 ANSWER 26 OF 31 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: DOCUMENT NUMBER:

1979:39145 CAPLUS

TITLE .

SOURCE:

Cyclodextrin chemistry. Selective modification of all

primary hydroxyl groups of .alpha. - and

.beta.-cyclodextrins

AUTHOR(S): CORPORATE SOURCE:

Boger, Joshua; Corcoran, Richard J.; Lehn, Jean Marie

Dep. Chem., Harvard Univ., Cambridge, MA, USA Helvetica Chimica Acta (1978), 61(6), 2190-218

CODEN: HCACAV; ISSN: 0018-019X

DOCUMENT TYPE:

90:39145

Journal LANGUAGE: English

The primary hydroxy groups of .alpha.-cyclodextrin were modified via benzoylation of all 18 hydroxy groups and selective debenzoylation of the primary hydroxy groups, or by selective activation of the primary hydroxy groups via a triphenylphosphonium salt and substitution with azide. The products obtained included hexakis(6-amino-6-deoxy)-.alpha.cyclodextrin.6HCl and hexakis(6-O-methyl)-.alpha.-cyclodextrin. .beta.-Cyclodextrin gave heptakis(6-azido-6-deoxy)-.beta.-cyclodextrin tetradeca(2,3)acetate by direct substitution.

L14 ANSWER 27 OF 31 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1978:136862 CAPLUS

DOCUMENT NUMBER:

88:136862

TITLE:

Carbon-13-proton inter-residue coupling in

disaccharides, and the orientations of glycosidic

bonds

AUTHOR (S): CORPORATE SOURCE: Parfondry, Alain; Cyr, Natsuko; Perlin, Arthur S. Dep. Chem., McGill Univ., Montreal, QC, Can.

SOURCE:

Carbohydrate Research (1977), 59(2), 299-309

CODEN: CRBRAT; ISSN: 0008-6215

DOCUMENT TYPE:

Journal

LANGUAGE: English

In examg. orientations of glycosidic linkages, measurements of three-bond coupling between 13C-1 and 1H-4', or 13C-4' and 1H-1, have been made from natural abundance, 1H-coupled, 13C-NMR spectra of maltose, cyclohexaamylose, and related compds. Maltose and cyclohexaamylose in water exhibit inter-residue 13C-O-C-1H couplings of close to 3 Hz. In terms of torsional angles, .PHI. and .PSI., these findings suggest that, in aq. soln., the mols. favor conformations that are appreciably more staggered than those known to exist in the solid state. Analogous measurements on O-acetyl derivs. suggest that .PHI. is smaller, and .PSI.larger, than in maltose. Data are also presented for sucrose, maltosan, and .alpha.,.alpha.-trehalose.

L14 ANSWER 28 OF 31 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1974:83442 CAPLUS

DOCUMENT NUMBER:

80:83442

TITLE:

Carbon-13 nuclear magnetic resonance spectra of

cycloamyloses and their peracetates

AUTHOR (S): CORPORATE SOURCE: Takeo, Kenichi; Hirose, Kenji; Kuge, Takashi Dep. Agric. Chem., Kyoto Prefect. Univ., Kyoto, Japan

Chemistry Letters (1973), (12), 1233-6

CODEN: CMLTAG; ISSN: 0366-7022

SOURCE:

DOCUMENT TYPE: Journal LANGUAGE: English

Carbon-13 chem. shifts were detd. for cyclohexa-, -hepta-, and -octamylose, amylase, Me 6-deoxy-.alpha.-D-glucopyranoside, 6-deoxycyclohexaamylose and its peracetate, and the peracetates of cyclohexa-, -hepta-, and -octaamylose. Steric effects imposed by the cyclic nature of the dextrins on the conformation of the glycopyranose residues were reflected in their spectra.

L14 ANSWER 29 OF 31 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1971:9680 CAPLUS

DOCUMENT NUMBER:

74:9680

TITLE:

Conformation of peracetylated cyclodextrins

AUTHOR(S):

Takeo, Kenichi; Kuge, Takashi

CORPORATE SOURCE: SOURCE:

Dep. Agr. Chem., Kyoto Prefect. Univ., Kyoto, Japan Agricultural and Biological Chemistry (1970), 34(9),

1416-19

CODEN: ABCHA6; ISSN: 0002-1369

DOCUMENT TYPE:

Journal

LANGUAGE:

English

NMR spectral anal. of peracetylated cyclodextrins suggested that the glucose residues exist largely in the Cl conformation.

L14 ANSWER 30 OF 31 CAPLUS COPYRIGHT 2003 ACS 1970:101035 CAPLUS

ACCESSION NUMBER: DOCUMENT NUMBER:

72:101035

TITLE:

Conformation of amylose and its derived products. IV.

Conformation of acetylated cyclodextrins and amylose Casu, Benito; Reggiani, Mario; Gallo, Gian G.;

AUTHOR(S):

Vigevani, Aristide

CORPORATE SOURCE:

Ist. Sci. Chim. Biochim. G. Ronzoni, Milan, Italy

SOURCE:

Carbohydrate Research (1970), 12(2), 157-70 CODEN: CRBRAT; ISSN: 0008-6215

Journal

DOCUMENT TYPE: LANGUAGE:

English

The conformation of the monomeric units and of the polymeric chain of the peracetates of .alpha.- and .beta.-cyclodextrin and amylose were investigated by ir and PMR spectroscopy. The spin-spin coupling consts. of the ring protons and the ir spectra indicate the C1 conformation for the D-glucopyranose units. The ir dichroism of an oriented film of amylose triacetate is consistent with a helical conformation of the chain. The chem. shift difference of signals for H-1 and H-4 in .beta.-cyclodextrin triacetate (assumed to be in a "quasieclipsed" chain conformation) and amylose triacetate is consistent with a rotation of the monomeric units of amylose triacetate around the C-1-O and C-4-O bonds. The solvent effect on the chem. shift of the ring and acetyl protons was studied and assignments for the acetyl signals of the triacetates of cyclodextrins and amylose are proposed.

L14 ANSWER 31 OF 31 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1969:97113 CAPLUS

DOCUMENT NUMBER:

70:97113

TITLE:

Clathrate compounds. XX. Optical rotatory dispersion

spectra and conformation of glucose units in

cyclodextrins

AUTHOR (S):

Cramer, Friedrich; Mackensen, Georg; Sensse, Karl

CORPORATE SOURCE:

Max-Planck Inst. Exp. Med., Goettingen, Fed. Rep. Ger.

SOURCE:

Chemische Berichte (1969), 102(2), 494-508 CODEN: CHBEAM; ISSN: 0009-2940

DOCUMENT TYPE:

Journal

LANGUAGE: German

The comparison between the O.R.D. spectra of various cyclodextrin derivs. (carboxylic and sulfonic acid esters, iodides, xanthates, amines, and ethers) with that of the correspondingly substituted methyl

D-glucopyranosides showed an .alpha.-D-glycoside linkage of the

D-glucopyranoside units, and a probable C1 (D) chair conformation of the D-glucose rings.

L25 ANSWER 1 OF 15 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2002:906422 CAPLUS

DOCUMENT NUMBER: 138:5717

TITLE: Sealing element for vessel or container closures

having improved barrier properties

INVENTOR(S): Wood, Will; Beaverson, Neil
PATENT ASSIGNEE(S): Cellresin Technologies, Llc, USA

SOURCE:

PCT Int. Appl., 36 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE: E: FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

KIND DATE APPLICATION NO. DATE PATENT NO. ____ WO 2002-IB3010 20020506 WO 2002094964 A2 20021128 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG N. INFO.: US 2001-288839P P 20010505 PRIORITY APPLN. INFO.: The present invention relates to closure elements for containers comprising a sealing element, the sealing element comprising a thermoplastic polymer and an effective absorbing amt. of a cyclodextrin material; wherein the cyclodextrin material is selected from the group comprising .alpha.-cyclodextrin, .beta.-cyclodextrin, .gamma.-cyclodextrin, derivs. of .alpha.-cyclodextrin, .beta.-cyclodextrin and .gamma.-cyclodextrin and mixts. thereof. It has been found, that the sealing elements (e.g., liners) show excellent barrier properties with

respect to permeants, such as arom. substances, esp. trichloroanisole,

L25 ANSWER 2 OF 15 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2002:127035 CAPLUS

ACCESSION NUMBER: DOCUMENT NUMBER:

136:369919

aldehydes or ketones and/or impurities from the polymer.

TITLE:

Oligosaccharide analogues of polysaccharides. Part 24. Synthesis of cyclodextrin analogues containing a substituted buta-1,3-diyne or a 1,2,3-triazole unit and analysis of intrampleoular hydrogen bonds.

and analysis of intramolecular hydrogen bonds Hoffmann, Barbara; Bernet, Bruno; Vasella, Andrea Laboratorium fur Organische Chemie, ETH-Honggerberg,

Zurich, CH-8093, Switz.

CORPORATE SOURCE:

AUTHOR(S):

PUBLISHER:

SOURCE:

Helvetica Chimica Acta (2002), 85(1), 265-287

CODEN: HCACAV; ISSN: 0018-019X Verlag Helvetica Chimica Acta

DOCUMENT TYPE:

Journal English

The .alpha.- and .gamma.-CD analogs, which possess a hexa-2,5-diyne-1,6dioxy unit, were synthesized by intramol. coupling of the bis-O-propargylated maltohexaoside, or the analogous maltooctaoside, followed by deprotection. The dialkynylated linear oligosaccharides were obtained by glycosidation of propargyl alc. with protected hexa- or octa-.beta.-D-phenylthio-maltosides, reductive cleavage of the benzylidene acetal, and propargylation of the terminal HO-C(4) group, resp. Two .beta.-CD analogs, which possess a penta-1,3-diyn-1-yl-5-oxy unit, were similarly obtained by intramol. oxidative coupling. The linear dialkynylated oligosaccharides used were obtained by two consecutive glycosylations, first with protected phenylthio-.beta.-D-malto-hexosides as donor, and then by glycosylation of the resulting propargyl maltohexoside with the C(4)-ethynylated donor I (R = p-chlorobenzyl). The proximity of the terminal units of maltooligosaccharides allowed a facile intramol. cycloaddn. of a protected .alpha.-2-azidoethynyl-4''''-0propargyl-hexamaltoside to the isomeric triazoles, which were deprotected. Anal. of the intramol. H-bonds in five products showed that insertion of a noncarbohydrate link interrupts a single flip-flop H-bond.

REFERENCE COUNT: 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER:

1999:606775 CAPLUS

DOCUMENT NUMBER:

131:317265

TITLE:

A new specific enzyme immunoassay allowing an

efficient pharmacokinetic evaluation of

.gamma.-cyclodextrin after intravenous administration

to rats

AUTHOR (S):

Creminon, Christophe; Djedaini-Pilard, Florence; Vienet, Raymond; Pean, Christophe; Grognet, Jean-Marc;

Grassi, Jacques; Perly, Bruno; Pradelles, Philippe

CORPORATE SOURCE:

CEA, DRM, Service de Pharmacologie et d'Immunologie, CEA, DRM, Service de Pharmacologie et d'Immunologie,

SOURCE:

CEA-Saclay, Gif s/Yvette, F-91191, Fr.
Pharmaceutical Research (1999), 16(9), 1407-1411

CODEN: PHREEB; ISSN: 0724-8741

PUBLISHER:

Kluwer Academic/Plenum Publishers

DOCUMENT TYPE:

Journal

English LANGUAGE:

Purpose. Because of its ability to form complexes with drugs, .gamma.-cyclodextrin is of great potential value in pharmaceutical formulations. The biol. fate of .gamma.-cyclodextrin must therefore be considered in safety evaluation, using sensitive and specific methods applicable to biol. fluids. Methods. Antibodies were raised against .gamma.-cyclodextrin, allowing the development of a new enzyme immunoassay. The anal. characteristics of this assay were evaluated. Rats were given a single i.v. 25 mg/kg dose of .gamma.-cyclodextrin. Plasma and urine samples were collected and assayed. Results. This new enzyme immunoassay was sensitive (limit of detection close to 94 pg/mL) and suitable for quantification of .gamma.-cyclodextrin in urine and plasma after methanol extn. The use of different linear and cyclic compds. demonstrated the high specificity of the assay. After i.v. administration, the concn. of .gamma.-cyclodextrin rapidly decreased in the plasma while the mol. was probably distributed into the tissues. Although urinary elimination predominates, only 50% of the injected .gamma.-cyclodextrin was recovered in urine, suggesting enzymic degrdn. and/or tissue storage. Conclusions. This assay may provide important information on the fate of .gamma.-cyclodextrin inclusion complexes dedicated to drug-delivery using various modes of administration (oral, parenteral, transmucosal or dermal).

REFERENCE COUNT:

THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 4 OF 15 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: DOCUMENT NUMBER:

1999:248588 CAPLUS

TITLE:

130:296916 Chemical synthesis of an amylose-like polysaccharide

by polymerization of partially benzylated phenyl

1-thio-.beta.-maltooctaoside derived from

.gamma.-cyclodextrin

AUTHOR (S):

Nishikl, Masahiko; Ousaka, Youko; Nishi, Norio;

Tokura, Seiichi; Sakairi, Nobuo

CORPORATE SOURCE:

Division of Bio-science, Graduate School of Environmental Earth Science, Hokkaido University,

THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

Sapporo, 060-0810, Japan

SOURCE:

Carbohydrate Polymers (1999), 39(1), 1-6

CODEN: CAPOD8; ISSN: 0144-8617

PUBLISHER: DOCUMENT TYPE: Elsevier Science Ireland Ltd.

Journal

English

An amylose-like .alpha.-(1,4)-glucan was synthesized by polycondensation and subsequent deprotection of a partially benzylated Ph 1-thio-.beta.-maltooctaoside having a sole hydroxyl group at the

non-reducing end. The key octasaccharide monomer 6 was prepd. by means of a single-site acetolytic reaction of fully acetylated .gamma.-cyclodextrin and several subsequent chem. manipulations at its reducing and non-reducing ends. On activation with Me triflate, the polycondensation of 6 was found to proceed in di-Et ether through intermol. glycosidation. The mol. wt. of the product obtained by preparative GPC on Sephadex LH-60 was 10 000-18 000. Removal of the O-benzyl groups under Birch reaction

gave .alpha.-(1,4)-glucan, the stereoregularity of which was confirmed by 1H and 13C NMR spectroscopy.

L25 ANSWER 5 OF 15 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1998:631393 CAPLUS

DOCUMENT NUMBER:

INVENTOR(S):

REFERENCE COUNT:

129:246822

TITLE:

Cyclodextrin borate complexes Baur, Rudiger; Macholdt, Hans-Tobias

PATENT ASSIGNEE(S):

Clariant G.m.b.H., Germany

SOURCE:

Eur. Pat. Appl., 12 pp.

CODEN: EPXXDW

Patent

DOCUMENT TYPE:

German LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

KIND DATE APPLICATION NO. DATE PATENT NO. ____ EP 866076 A2 19980923 EP 1998-104104 19980307 EP 866076 A3 19990407 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

IE, SI, LT, LV, FI, RO

DE 1997-19711260 19970318 DE 19711260 A1 19980924 US 6083653 20000704 US 1998-39706 19980316 Α JP 1998-67106 19980317 A2 19981110 JP 10298205 DE 1997-19711260 A 19970318 PRIORITY APPLN. INFO.:

Complexes with good charge control properties, which disperse readily in toner, powder coating, and electret binder compns., comprise 1-4 cyclodextrin units and a borate residue B(O-)4-. Stirring 1 mol .beta.-cyclodextrin (d.p. 7), 128 g satd. soda soln., and 1.6 L H2O at 45.degree. until the pH was 12.8, adding 2 mol B(OH)3, stirring for 20 min, cooling to 12.degree., and adding 8 L MeOH gave 1073 g complex contg. 6.5% H2O and 0.3% B, with sp. surface 4.0 m2/g, sp. resistance 107 .OMEGA.-cm, and elec. cond. 5.37 mS/cm. Use of the complex in dry toner compns. is exemplified.

L25 ANSWER 6 OF 15 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1998:378616 CAPLUS

DOCUMENT NUMBER:

129:149144

TITLE:

Transfer reactions catalyzed by cyclodextrin glucosyltransferase using 4-thiomaltosyl and C-maltosyl fluorides as artificial donors

AUTHOR(S):

Bornaghi, Laurent; Utille, Jean-Pierre; Rekai, El Djouhar; Mallet, Jean-Maurice; Sinay, Pierre; Driguez,

Hugues

CORPORATE SOURCE:

Centre de Recherches sur les Macromolecules Vegetales,

(CERMAV-CNRS), Grenoble, F-38041, Fr.

SOURCE:

Carbohydrate Research (1998), Volume Date 1997,

305 (3-4), 561-568

CODEN: CRBRAT; ISSN: 0008-6215

PUBLISHER:

Elsevier Science Ltd.

DOCUMENT TYPE: LANGUAGE:

Journal English

Cyclodextrin glycosyltransferase enzyme from Bacillus circulans catalyzed

the effective conversion of 4-thio-.alpha.-maltosyl fluoride into

cyclo-.alpha.-(1.fwdarw.42)-thiomalto -tetraoside, -pentaoside, -hexaoside and linear hemi-thiomalto-oligosaccharides. However, under the same

conditions, C-maltosyl fluoride afforded only linear modified maltotetraose, maltohexaose and maltooctaose in moderate yield.

THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 14

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 7 OF 15 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 1997:194525 CAPLUS

DOCUMENT NUMBER:

126:242772

TITLE:

New functions of peracylated .beta.-cyclodextrins as

sustained-release drug carriers Uekama, K.; Hirayama, F.; Irie, T.

AUTHOR (S): CORPORATE SOURCE:

Faculty of Pharmaceutical Sciences, Kumamoto

University, Kumamoto, 862, Japan

SOURCE:

Proceedings of the International Symposium on Cyclodextrins, 8th, Budapest, Mar. 31-Apr. 2, 1996 (1996), 413-418. Editor(s): Szejtli, J.; Szente, L.

Kluwer: Dordrecht, Neth.

CODEN: 64CDAL

DOCUMENT TYPE:

Conference English

LANGUAGE:

A series of peracylated .beta.-CyDs with different alkyl chains (acetyl to

octanoyl) were prepd., and their bioadhesive, biodegradable, and film-forming properties were evaluated with particular attention to their potential as possible novel sustained-release carriers for water-sol.

drugs in parenteral, oral and transdermal formulations.

ACCESSION NUMBER:

L25 ANSWER 8 OF 15 CAPLUS COPYRIGHT 2003 ACS 1995:396641 CAPLUS

DOCUMENT NUMBER:

TITLE:

Modification of cyclodextrins by insertion of a

heterogeneous sugar unit into their skeletons. Synthesis of 2-amino-2-deoxy-.beta.-cyclodextrin from

.alpha.-cyclodextrin

AUTHOR(S): Sakairi, Nobuo; Wang, Lai-Xi; Kuzuhara, Hiroyoshi

CORPORATE SOURCE: Institute of Physical and Chemical Research, Saitama,

351-01, Japan

SOURCE: Journal of the Chemical Society, Perkin Transactions

1: Organic and Bio-Organic Chemistry (1995), (4),

437-43

CODEN: JCPRB4; ISSN: 0300-922X Royal Society of Chemistry

PUBLISHER: Royal So DOCUMENT TYPE: Journal

DOCUMENT TYPE: Journal LANGUAGE: English

AB Title aminodeoxycyclodextrin I was prepd. from .alpha.-cyclodextrin via acetolysis of fully acetylated .alpha.-cyclodextrin resulted in restricted fission of only one of the glucosidic bonds to give the acyclic maltohexaose peracetate and coupling of D-glucosamine precursor with O-benzylated maltohexaoside. Regioselective modifications of both terminals of hexasaccharide were performed by employing Lewis acid-catalyzed thioglycosidation and O-benzylidenation followed by its reductive cleavage as the key reactions, to give the partially O-benzylated maltohexaoside with the sole hydroxy group at the 4VI-position.

L25 ANSWER 9 OF 15 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1994:612786 CAPLUS

DOCUMENT NUMBER:

121:212786

TITLE:

Controlled release of the LHRH agonist buserelin acetate from injectable suspensions containing triacetylated cyclodextrins in an oil vehicle

Matsubara, K.; Irie, T.; Uekama, K.

AUTHOR(S): CORPORATE SOURCE:

Pharma Research Laboratories, Hoechst Japan Ltd,

Kawagoe, Saitama, 350-11, Japan

SOURCE:

Journal of Controlled Release (1994), 31(2), 173-80

CODEN: JCREEC; ISSN: 0168-3659

DOCUMENT TYPE: Journal LANGUAGE: English

ABB Heptakis(2,3,6-tri-O-acetyl)-.beta.-cyclodextrin (TA-.beta.-CyD) and octakis(2,3,6-tri-O-acetyl)-.gamma.-cyclodextrin (TA-.gamma.-CyD) were prepd. for use as hydrophobic carriers of buserelin acetate (BLA), an agonist of LH-releasing hormone. The results from this study suggest that the in vitro release of BLA from the peanut oil suspension into the aq. phase was retarded by complexation with TA-CyDs. A single s.c. injection of the oily suspension of BLA contg. TA-.beta.-CyD and TA-.gamma.-CyD in rats led to retardation of plasma levels of BLA, resulting in 25- and 39-fold longer mean residence times, resp., than that of BLA alone. Simultaneously with the suppression of plasma testosterone to castrate level, the pharmacol. effectiveness of BLA continued for 1-2 wk and significant wt. redn. of genital organs was obsd. due to the antigonadal effect. Since TA-.beta.-CyD and TA-.gamma.-CyD were degraded enzymically in rat skin homogenates, both TA-CyDs can be useful as bioabsorbable sustained-release carriers for hydrophilic peptides following the s.c. injection of an oily suspension.

L25 ANSWER 10 OF 15 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1994:491479 CAPLUS

DOCUMENT NUMBER:

121:91479

TITLE:

Possible use of triacetylated cyclodextrins in the preparation of sustained-release oily injection of

LHRH agonist, buserelin acetate

AUTHOR(S): CORPORATE SOURCE: Matsubara, K.; Kuriki, T.; Irie, T.; Uekama, K. Res. and Dev. Lab., Hoechst Jpn. Ltd., Kawagoe, 350,

Japan

SOURCE:

Minutes Int. Symp. Cyclodextrins, 6th (1992), 547-50. Editor(s): Hedges, Allan R. Ed. Sante: Paris, Fr.

CODEN: 60BCAL

DOCUMENT TYPE:

Conference English

LANGUAGE: English

AB Triacetylated .beta.- and .gamma.-cyclodextrins (TA-CyDs) were prepd. and some of their phys. properties such as hygroscopicities and solubilities were investigated. A single s.c. injection of the oily suspension contg. the buserelin acetate (BLA)-TA-CyDs complexes into rats provided sustained plasma level of BLA, reflecting the in-vitro release behavior as the case of BLA-diethyl-.beta.-cyclodextrin complex. These hydrophobic BLA-CyD complexes, consequently suppressed testosterone levels to castrate for 1-4 wk and the significant wt. redn. was obsd. in genital organs.

L25 ANSWER 11 OF 15 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1994:408900 CAPLUS

DOCUMENT NUMBER:

121:8900

TITLE:

Enantiomeric resolution of 4-(3,4-dichlorophenyl)-3,4-

dihydro-1(2H)-naphthalenone

INVENTOR(S):

Lorenz, Douglas A.; Brose, Daniel J.

PATENT ASSIGNEE(S):

Bend Research, Inc., USA

SOURCE:

U.S., 5 pp. CODEN: USXXAM

DOCUMENT TYPE:

Patent

English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5288916	A	19940222	US 1993-36809	19930325
EP 616996	A1	19940928	EP 1994-301884	19940316
EP 616996	B1	19970730		
R: AT,	BE, CH, DE	, DK, ES, FR	, GB, GR, IE, IT, LI	, LU, NL, PT, SE
EP 781753	A1	19970702	EP 1996-120170	19940316
EP 781753	B1	19990331		
R: AT,	BE, CH, DE	, DK, ES, FR	, GB, GR, IE, IT, LI	, LU, NL, PT, SE
AT 156113	E	19970815	AT 1994-301884	19940316
ES 2105510	Т3	19971016	ES 1994-301884	19940316
AT 178307	E	19990415	AT 1996-120170	19940316
ES 2129248	Т3	19990601	ES 1996-120170	19940316
CA 2119674	AA	19940926	CA 1994-2119674	19940323
CA 2119674	С	19980414		
FI 9401376	A	19940926	FI 1994-1376	19940324
JP 07002718	A2	19950106	JP 1994-55428	19940325
PRIORITY APPLN. 1	NFO.:		US 1993-36809	19930325
			EP 1994-301884	19940316

Enantiomers of 4-(3,4-dichlorophenyl)-3,4-dihydro-1(2H)-naphthalenone (I) AB are resolved on an industrial scale by contacting racemic I with a homogeneous or nonhomogeneous liq. mixt. of a solvent (e.g., alcs. alkanes, ketones, etc.) and water, pure and unsupported .gamma.-cyclodextrin or its derivs. are added to form a selectively bound I enantiomer complex, the mixt. stirred or centrifuged to sep. the complex ppt., and the I enantiomer sepd. from the cyclodextrin complex by solvent extn.

L25 ANSWER 12 OF 15 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1991:24407 CAPLUS

DOCUMENT NUMBER:

114:24407

TITLE:

Interglycosidic torsion angle estimation by carbon-13-proton coupling constant measurements

AUTHOR (S):

Morat, Claude; Taravel, Francois R.

CORPORATE SOURCE:

Lab. Etud. Dyn. Struct. Select., Univ. Joseph Fourier,

Grenoble, 38041, Fr.

SOURCE:

Bulletin of Magnetic Resonance (1989), 11(3-4), 321-3

CODEN: BUMRDT; ISSN: 0163-559X

DOCUMENT TYPE:

Journal English

LANGUAGE:

An equation relating 3-bond 13C-proton coupling and torsional bond angle was applied to detg. the interglycosidic torsional angle in acetylated cyclomaltodextrins, cellulose triacetate, and amylose triacetate.

L25 ANSWER 13 OF 15 CAPLUS COPYRIGHT 2003 ACS 1990:459717 CAPLUS

ACCESSION NUMBER:

113:59717

DOCUMENT NUMBER: TITLE:

Measurement of long-range heteronuclear couplings:

application to oligosaccharide conformation

AUTHOR (S):

Morat, Claude; Taravel, Francois R.

CORPORATE SOURCE:

Lab. Etud. Dyn. Struct. Sel., Univ. Joseph Fourier,

Grenoble, 38041, Fr.

SOURCE:

Tetrahedron Letters (1990), 31(10), 1413-16

CODEN: TELEAY; ISSN: 0040-4039

DOCUMENT TYPE:

Journal

English

The vicinal or 3-bond coupling consts. [3J(C,H)] values were measured by using 2-dimensional J heteronuclear-resolved NMR spectroscopy to est. interglycosidic conformations in various oligosaccharides with a d.p. ranging from 6 to 30.

L25 ANSWER 14 OF 15 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1974:83442 CAPLUS 80:83442

DOCUMENT NUMBER: TITLE:

Carbon-13 nuclear magnetic resonance spectra of

cycloamyloses and their peracetates

AUTHOR (S): CORPORATE SOURCE: Takeo, Kenichi; Hirose, Kenji; Kuge, Takashi

Dep. Agric. Chem., Kyoto Prefect. Univ., Kyoto, Japan Chemistry Letters (1973), (12), 1233-6

SOURCE:

CODEN: CMLTAG; ISSN: 0366-7022

DOCUMENT TYPE:

Journal

LANGUAGE:

English

Carbon-13 chem. shifts were detd. for cyclohexa-, -hepta-, and -octamylose, amylase, Me 6-deoxy-.alpha.-D-glucopyranoside, 6-deoxycyclohexaamylose and its peracetate, and the peracetates of cyclohexa-, -hepta-, and -octaamylose. Steric effects imposed by the cyclic nature of the dextrins on the conformation of the glycopyranose residues were reflected in their spectra.

L25 ANSWER 15 OF 15 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 1971:9680 CAPLUS

DOCUMENT NUMBER:

74:9680

TITLE:

Conformation of peracetylated cyclodextrins

AUTHOR(S):

Takeo, Kenichi; Kuge, Takashi

CORPORATE SOURCE: SOURCE:

Dep. Agr. Chem., Kyoto Prefect. Univ., Kyoto, Japan Agricultural and Biological Chemistry (1970), 34(9),

1416-19

CODEN: ABCHA6; ISSN: 0002-1369

DOCUMENT TYPE:

Journal English

LANGUAGE:

NMR spectral anal. of peracetylated cyclodextrins suggested that the glucose residues exist largely in the Cl conformation.